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THE IMPACTS OF FIRM-SPECIFIC FACTORS AND MACROECONOMICS FACTORS TOWARDS ADOBE'S PERFORMANCE

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ABSTRACT

This study aims to examine the impact of firm-specific factors and the macroeconomics factors towards the performance of Adobe Inc. The data for this study is obtained from the annual report of Adobe Inc. from year 2014 to year 2018. The performance of the company is measured by the return on assets. On the other hand, the firm-specific factors are represented by CG index score, average collection period (credit risk), operating margin (operational risk) and current ratio (liquidity risk) while the macroeconomics factors are represented by market risk which include gross domestics products, exchange rate, inflation, interest rate and standard deviation. Data obtained was then being analyzed by using Statistical Package for Social Science (SPSS) version 22. This study applied descriptive analysis, correlation analysis, coefficients and stepwise multiple regression analysis to examine the relationship among the variables. The findings of this study showed that both the operating margin and exchange rate have a significant relationship with the company performance in which they can influence the performance of company. The study has recommended the company can actually reduce their operating expense and create economies of scale in the business operation to improve the operating margin. Moreover, the company can also use the local suppliers or employ the local workers instead of outsource from other countries to deal with changes in exchange rate.

Keywords: *Operating Margin, Exchange Rate, Company Performance, Corporate Governance*

1.0 INTRODUCTION
1.1 BACKGROUND OF STUDY

Adobe Inc. or formerly known as Adobe Systems Incorporated, was established in 1982 (Adobe, 2019). It was founded in Mountain View, California by Charles Greshchke and John Warnock. The company was began when the founders wanted to bring PostScript language to the market. In 1986, the company started to went public. The popular PDF document format was then released in year 1993 (Cao, 2018). In May 1997, the company was then reincorporated in Delaware (Adobe, 2019). Today, the company has dominated the professional creative software market, having offices in all over the world of 25 countries and over 18,000 employees (Cao, 2018). Engaging in segments such as the digital media, digital experience and publishing, Adobe has released many creativity software over the years (Adobe, 2019). The products of Adobe include Adobe Creative Cloud, Adobe Photoshop, Adobe Premiere Pro, Adobe Acrobat, Adobe Bridge, Adobe Prelude, Adobe Dreamweaver, Adobe InDesign, Adobe Flash, Adobe Illustrator, and so on (Adobe, 2019).

As a multinational company, Adobe Inc. have a Corporate Governance Guidelines to assist the Board of Director in fulfilling their responsibilities. The purpose of guidelines are to encourage greatest ethical business practices and transparency (Adobe, 2019). In other words, it aims to promote sound corporate governance. Despite that, there are still some issues that arise regrading corporate governance in Adobe Inc.

One of the corporate governance issues that arises is regarding responsibility, which is the cyber-attack on Adobe Inc. In October 2013, there is a cyber-attack to Adobe Inc. whereby more than 38 million customer accounts data were being stolen. As a result, Adobe had to face a huge amount of legal fees of US$1.2 million. Moreover, it also paid an untold amount in order to settle the claims of customers (Pauli, 2015). Thus, the failure or negligence of the risk management of the organization has resulted in this issues. Regarding this, the responsibility issue has arisen. Although the management is responsible for implementation of risk management of corporation, the Board of Director is also responsible to oversee whether the company has designed a proper risk management program and the implementation of the program by the management. The failure of the Board to oversee risk management program in the company had resulted in the loss of enormous millions in shareholder value (MondoVisione, 2014).

In addition, this case also resulted in the reputation issue of Adobe Inc. The cyber-attack to Adobe Inc. which resulted in stolen of million data from the customers have affected the image of the company. During a financial filling, Adobe had acknowledged that they are always the target for the online theft. Owing to this, hackers have repeatedly exploit the online databases with the common passwords to steal the data (Perlroth, 2013). Moreover, the negligence of the Board to oversee the risk management system in the company is also contributing to the cyber risk (MondoVisione, 2014). Thus, when the cyber-attack happened in 2013, it caused in not only litigation and fines for Adobe Inc., but also the damage to their brand and reputation (Perlroth, 2013).

Apart from that, the company also faces several risks which will then affect the company performance. Some of the examples of the risks are operational risk and liquidity risk. Operational risk might arise in Adobe Inc. if there is any violation of the privacy rights of an individual as the company will be subject to class action lawsuits. This will then cause a disruption to the business and expose the company to higher liability which will directly affect the company performance (Adobe, 2019). Meanwhile, the liquidity risk will affect the company performance as the decline in revenue might happen when the company do not have enough cash to pay the necessary expenses related to operation. When this happen, operation of the company will be interrupted and the revenue will also be affected (Maverick, 2019).

All in all, there are so many risks that can affect the company performance. Hence, it is vital to analyze the relationship between the risks and the performance of company. In this study, the impacts of two types of factors on the company performance will be conducted which are the firm-specific factors and macroeconomics factors.

1.2 PROBLEM STATEMENT

When doing a business, risk is unavoidable to a company. The business activities are usually related to different types of risk. Risk can said to be the uncertainty on the expected income to be earned. When risk is managed properly, it will leave a positive impact to the company. On the other hand, if it is mismanaged, it will cause the negative impacts to the company. The company performance can actually be affected by the firm-specific factors such as operational risk, credit risk, liquidity risk and the macroeconomics factors (Simamora and Oswari, 2019).

Firstly, for the firm-specific factors such as the operational risk, the mismanagement of this risk is hazardous because it will result in financials scandal, financial market turbulence and market uncertainties. Crisis, which is a series of catastrophic events, might happen due to operational risk. Moreover, there are a lot of operational losses that had occurred owing to rogue trading, accounting scandal and insider fraud. In 2008, Société Générale had disclosed a significant losses of €4.9 billion because of unauthorized trade. In addition, the subprime crises in United States that result in the crash of the sub-prime mortgage market, was the cause of operational risk (Hemrit and Arab, 2012).

Meanwhile, for credit risk, it is also a crucial malaise which will result in the collapse of company. Besides, liquidity risk will also be a snare to company owing to the unsound risk assessment. There is actually a relationship between these two risks. This is because liquidity risk is being said to be a profit lowering cost for the liquidity risk increases when there is default loan (credit risk) due to less cash inflow. Moreover, when a financial institutions such as banks, raise the debts, it will result in higher risk as during the crisis time, the firm will become hard to roll over the debt. This has caused in liquidity problem (Ejoh, Okpa and Inyang, 2014). Besides, both of these risks are associated with the company performance. For liquidity risk, it is found that financial firm that generate higher liquidity will result in greater profitability. Meanwhile, for credit risk, studies shows that if there is a high loan loss provision which result in high non-performing loans in a financial institution, it will contribute to lower profitability of the institutions (Abbas, 2019).

On the other hand, the macroeconomics factors will also affect the growth of the firm. The monetary policy in a country will influence the firm's capability to get the external source of funds while the fiscal policy will influence the after tax net cash flow of a firm. It is found that the inflation, income level and growth rate can affect a firm's capital structure. Nonetheless, study also showed that this can also be further affected by the firm-specific factors. Hence, the interaction between both the

firm-specific factors and microeconomics factors can be used to determine the company performance (Egbunike and Okerekeoti, 2018).

As shown, most of the studies conducted for the firm-specific factors are mostly on financial institutions such as banks. Companies in software industry are scarcely being studied. There is lack of this kind of studies since the main focus is normally on banks. Moreover, the effect of the macroeconomics factors are also different from one industry to another. Hence, it is crucial to examine the influence of those factors on firms from the software industry.

Thus, in this study, we are going to examine the impact of the firm-specific factors and microeconomics factors on the company performance.

1.3 RESEARCH OBJECTIVES

In this research, there are three research objectives which are:

1. To investigate the impact of firm-specific factors towards company performance.

2. To investigate the impact of macroeconomics factors towards company performance.

3. To investigate the impact of both firm-specific factors and macroeconomics factors towards company performance.

1.4 RESEARCH QUESTIONS

In this research, there are three research questions which are:

1. What is the impact of firm-specific factors towards company performance?

2. What is the impact of macroeconomics factors towards company performance?

3. What is the impact of both firm-specific factors and macroeconomics factors towards company performance?

2.0 LITERATURE REVIEW
2.1 CORPORATE GOVERNANCE

Royaee and Dehkordi (2013) has stated that corporate governance can be said as the control system to enhance or maintain the stockholders interest. In other words, it can be defined as the system that control the company operating procedure for the purpose of ensuring the stockholders' interest is directed to the manager. It also mentioned that corporate governance is related to business direction, supervision and control of manager actions and the accountability to shareholders. In general, it is the way of governing the company, providing a framework for an accountability system of an institution (Royaee and Dehkordi, 2013).

Besides, Khan (2011) said that corporate governance can be defined as the institution, laws, customs, policies and processes that guides the corporations or organization on how they do and control the operations. It works to attain the objective of the corporation besides managing the relationship of the stakeholders which includes the shareholders and the board of directors. In addition, it also reduces the problem of principal-agent in a corporation via a mechanism that deals with accountability (Khan, 2011).

There are a few importance of corporate governance. Firstly, it can help to promote excellent management. This is because company that practice good governance will enable people not inked to it and thus enabling the assessment of its governance owing to transparency. Moreover, it also promote reputation and recognition as the company can obtain the trust of the customers, community and investors at large by practicing good corporate governance. In addition, corporate governance also reduces the corruption risk and mismanagement because transparency is being applied in the company (Sarah, 2017).

Apart from that, Velnampy and Pratheepkanth (2012) said the implementation of good corporate governance will help enhance the performance of the company. There is a positive relationship between the company's board composition and performance. This is because there is a higher returns when the board is dominated by independent outside directors. Therefore, companies with a higher percentage of external directors will have a higher average performance compared to a company with a smaller number of non-executive directors (Velnampy and Pratheepkanth, 2012).

The corporate governance can actually be represented by the corporate governance index score. The relative disclosure corporate governance index score can be developed by using five factors which are accountability, transparency, fairness, independence and sustainability.

2.2 CREDIT RISK

Spuchľáková, Valašková and Adamko (2015) said that credit risk is the loss that occur when default that cannot meet obligation happen under the condition of contract which then result in the loss of the creditors. The obligations might come from foreign account, settlement and payment of securities trading and lending activities. There may be a probability that a counterparty cannot repay the principal and interest. Credit risk can present in all sectors especially in banks, and other sectors which mostly is from credit activities. Besides, there is also existence of credit risk when entering into repurchase transaction, derivative transaction and securities lending (Spuchľáková et al, 2015).

The importance for managing credit risk is to prevent the company from bankruptcy. For example, for some companies such as the financial institution, the major reason for their bankruptcy is due to credit risk. This is because the debtors have failed to meet their obligations when the loans are due under the agreement. Next, it is also important to manage credit risk to shield against financial crisis. This is because credit risk can contribute to financial crisis. The reason is because a company is not only subject to one risk as they are also exposed to other risks which are related to one another. During financial crisis, the credit risk became paramount as many firms will face enormous loss due to the failure of the counterparties to deliver on contracts. Hence, it is important to manage the credit risk in a company (Mbiti, Lugogo and Keoch, 2018)

The credit risk can be calculated by the following formula:

$$\text{Credit risk} = \frac{\text{Revenue}}{\text{Average Collection Period}}$$

Meanwhile the average collection period can be obtained from below formula (Kenton, 2019):

$$\text{Average Collection Period} = \frac{\text{Account Receivables}}{\text{Revenue}} \times 365$$

In addition, the credit risk can also effect the performance of the company. Kaaya and Pastory (2013) had stated that there is a negative relationship between credit risk and the company performance. When the credit risk increase, the company performance tend to be lower. This is because the profit level of the company is lower with the increasing credit risk (Kaaya and Pastory, 2013).

2.3 OPERATIONAL RISK

Operational risk can be defined as the loss directly or indirectly caused by insufficient or failed internal processes, systems, people or other external events (Okeke, Aganoke and Onuorah, 2018). Operational risk can occur as a result from malfunctions of information systems, internal monitoring rules and procedures and reporting systems. Hence, operational risk can appear at various level such as technical and information technology, human errors and processes.

The importance for managing the operational risk is that it helps to provide protection against crisis (Hemrit and Arab, 2012). The operational risk which simply sum up the risks that might be undertaken by a firm or company, can be said as the global risk, that is linked to crisis. This is because operational risk is present when the system used by a company is influenced by external environmental factors. This explains the reason when origin of most bankruptcies in financial sector is due to operational risk. Hence, operational risk need to be managed properly to prevent disastrous crisis (Hemrit and Arab, 2012).

The operating risk can be calculated by operating margin. The formula of operating margin is shown as below (Kenton, 2019):

$$\text{Operating Margin} = \frac{\text{Operating Earnings (EBIT)}}{\text{Revenue}}$$

Besides, operating risk will also affect the company performance. Gadzo, Kportorgbi and Gatsi (2019) stated that there is a significant negative effect between the operational risk and the performance of company that is represented by the profitability of the company. It is found that when the exposure of the operational risk increases, the profit level of the company dwindles. Hence, there is a negative relationship between operational risk and company performance. However, according to Gikundi, Ondiek, Sawa and Musiega (2014), the studies found that there is a positive effect of operational risk on the profitability of the company.

2.4 LIQUIDITY RISK

Generally, liquidity can be said as the available amount for spending and investment (Rahman and Banna, 2015). According to Rahman and Banna (2015), liquidity risk is defined as the risk to the soundness or safety of an institution or financial condition of the institution due to being not able to meet the contractual obligation. This risk might come from various operations of financial intermediaries, supporters or facilitators. This is because they are totally liable to provide liquidity which is available when requested by third party (Rahman and Banna, 2015).

Next, it is important to manage the liquidity risk as liquidity risk will affect the profitability of the company. This is because liquidity in a company is vital and need to be maintained in order to make sure the business can run smoothly. It is also crucial in ensuring the company can pay its current obligations on business and the payment such as the interest expense that resulting from the long term or short term debt. Hence, managing the liquidity risk is important as it can immensely affect the company profitability (Ajao and Small, 2012).

Liquidity risk can be calculated by using the current ratio. The current ratio formula is shown as below (Kenton, 2019):

$$\text{Current Ratio} = \frac{\text{Current Asset}}{\text{Current Liabilities}}$$

Besides, the liquidity risk is also associated with the company performance. There is a significant negative effect of liquidity risk on company performance according to Arif and Anees (2012). This is because when there is insufficient liquidity, the company such as financial institution will have to borrow from the market even the rate is very high. This will increase the cost of the institution. As a result, the financial performance of the company will be adversely affected (Arif and Anees, 2012).

2.5 MARKET RISK

Market risk can be defined as the probability that is related to the uncertainty in a financial institution's portfolio income owing to the fluctuation or change in market condition relating to factors like interest rate, asset price and others (Abdellahi, Mashkani and Hosseini, 2017). This risk can also be said as inevitable or systematic risk relating to the market factors that cannot be diversified and will influence all companies. Such market factors include political events, war and catastrophic international event (Abdellahi, Mashkani and Hosseini, 2017).

Basically, this risk can be measured by beta and standard deviation. Beta which is a measure of systematic risk of an asset is widely apply in the financial analysis. It is used to reflect an asset's risk in respective to the market benchmark (Chong, Jennings and Philips, 2018). Meanwhile, standard deviation is a type of descriptive statistics that is used to measure the dispersion around a central tendency. In other word, the variability around the data is measured by using standard deviation (Allen, 2017).

Some of the examples of market risk indicators are inflation, interest rate, gross domestic products and exchange rate. In general, inflation can said to be the rise in price of goods, in which it lower a currency's purchasing power. It is actually caused by the increase in aggregate demand that is faster than in aggregate supply which then resulting in increased cost of goods and services. Meanwhile, interest rate is defined as the value which is obtained resulting from the effort of a value that has been invested or saved. The interaction between the exchange of money is then reflected in these rate. Next, the definition of exchange rate is that it is a currency value which is being compared to other currency (Samuel and Nurina, 2015). Lastly, based on Dynan and Sheiner (2018), gross domestic products is the values of the services and goods produced by the economy of a nation less the value of the services and goods used in production.

Besides, it is important to manage the market risk properly. This is because if this risk is not properly managed, it will turn into a malaise for an organizations or person which have exposure on the foreign currency market, capital market and also the monetary market. This will result in loss for the company or the person (Anghe, 2016).

Apart from that, there is also significant effect of market risk on the company performance. Kassi, Rathnayake, Louembe and Ding (2019) had mentioned that there is a negative effect of market risk on the performance of company which is measured by return of asset, profit margin and return on equity. This is because market risk is a hazard that may influence the company profitability (Kassi, Rathnayake, Louembe and Ding, 2019). However, according to Campa and Goldberg (1999), the exchange rate (market risk) has a positive relationship with the firm performance. This is because when the exchange rate appreciate, it will benefits the sector in United States that import goods.

2.6 PERFORMANCE

Taouab and Issor (2019) has mentioned that performance can be said as a certain result gained in economics, management and marketing that gives the characteristics of effectiveness, competitiveness and efficiency to the company. In other words, a company can be said is a performant when it is effective and efficient. Performance is believed can be attained via evaluation, quality, piloting, efficiency and effectiveness. Hence, in order to tell the performance level of a company, the result of the company will need to be able to be quantified (Taouab and Issor, 2019).

Meanwhile, Iuliana and Maria (2016) has stated that performance in a company is all that lead to the achievement of strategic goals. In other word, for an organization, performance can also means the improved cost-value, which is what that result in value creation. The company that has the ability to create economic value added is said to be efficient (Iuliana and Maria, 2016).

The performance of the company can be represented by return on asset (ROA). The formula of return on asset is shown as follows (Grant, 2019):

$$\text{Return on Asset} = \frac{\text{Net Income}}{\text{Average Total Asset}}$$

Return on asset can be said as the profits that is able to be generated by the company in relation to the investment made in the total assets. The higher the ratio is better as it represents the effectiveness of the company in using the assets to earn net income. The higher of this ratio also indicates the performance of the company is effective with a higher rate of return (Saragih, 2018).

3.0 METHODOLOGY

3.1 SAMPLING TECHNIQUE

In this study, the unit analysis that involved is the organization. Meanwhile, the population of this study is all the companies in the software industry in United States. In order to carry out the study, the sample that is being used is the software company from United States which is Adobe Inc. In this study, we are going to examine the impacts of the firm-specific factors and macroeconomics factors on the company performance of Adobe Inc.

3.2 STATISTICAL TECHNIQUE

The company that is used in this study is Adobe Inc. The data of the company performance such as return on asset and firm-specific factors in this study such as the credit risk, operational risk and liquidity risk are obtained from the annual report of Adobe Inc. from year 2014 to year 2018. The corporate governance index score is found through the disclosure information that comprised of five factors which are accountability, transparency, fairness, independence and sustainability. On the other hand, the data for the macroeconomics factors such as gross domestic products, inflation, interest rate and exchange rate are obtained from the official website of International Monetary Fund and World Bank. The data of standard deviation of the daily stock price change is obtained from Yahoo Finance.

3.3 DATA ANALYSIS TECHNIQUE

The data analysis technique that used in this study is the IBM SPSS Statistics Version 22 Statistical Software. SPSS standing for the Social Sciences Statistical Package is the software that can be used to perform data entry and analysis as well as to create table analysis.

First, this study will use descriptive analysis. Descriptive analysis is the analysis that is used to describe a study's data features (Social Research Methods, 2006). In other words, it describe what the data shows. In this study, Adobe Inc.'s performance is represented by return on assets (ROA), while the risk associated with the company is assessed by the corporate governance index score, current ratio, operating margin, and average collection period. The macroeconomic factors are represented by gross domestic products (GDP), inflation, interest rate, exchange rate, and standard deviation.

Apart from that, correlation analysis is also used to investigate the relationship between the independent and dependent variables. In this analysis, a correlation coefficient called the Pearson Correlation Coefficient will be used to estimate the sample. This coefficient of correlation, denoted as r, is used to measure the strength between two variables. If the value of r is closer to zero, there will be

a huge variation in the best fit line data (Borges et al., 2017). In this study, the strength between the risk factors and company performance will be tested by using correlation analysis.

Finally, this study also uses the stepwise multiple regression analysis. This analysis is used to test the effect on dependent variables for the changes in independent variables. The purpose of carrying out regression analysis is to predict changes in dependent variables based on the independent variables value (Borges et al., 2017).
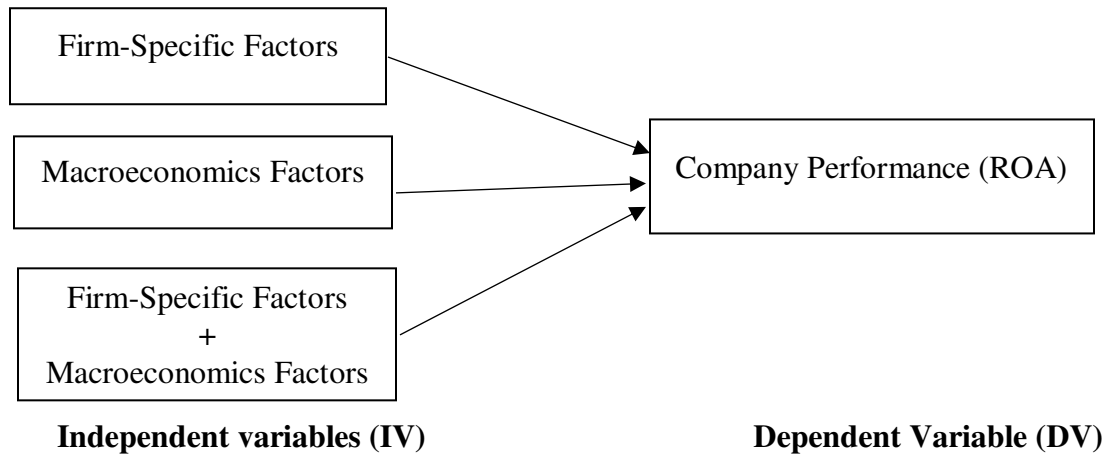
3.4 VARIABLES

In this study, the independent variables are the firm-specific factors and the macroeconomics factors. Meanwhile the dependent variables will be the company performance. The firm-specific factors will be comprising of corporate governance index score, current ratio, operating margin, average collection period while the macroeconomics factors will include gross domestic products, inflation, interest rate, exchange rate and standard deviation. The dependent variable will be the return on asset. The measurement of the variables are shown as below:

Table 3.4.1: Measurement of variables

No	Variables	Notation	Measurement
1	Index Score	INDX	Corporate governance elements
2	Current Ratio	CR	Current Assets / Current Liabilities
3	Operating Margin	OM	EBIT / Revenue
4	Average Collection Period	ACP	(Account Receivable/Revenue) x 365
5	Gross Domestic Products	GDP	5-year gross domestic products rate
6	Inflation	INF	5-year inflation rate
7	Exchange Rate	ER	5-year exchange rate
8	Interest Rate	IR	5-year interest rate
9	Standard Deviation	SD	5-year daily stock price change

3.5 RESEARCH FRAMEWORK

According to the conceptual research framework, in this study, it involves one dependent variable and two independent variables. The research framework of this study is as shown as follows:

| Firm-Specific Factors |
| Macroeconomics Factors | → | Company Performance (ROA) |
| Firm-Specific Factors + Macroeconomics Factors |

Independent variables (IV)   **Dependent Variable (DV)**

Figure 3.5.1: Research Framework

3.6 ORDINARY LEAST SQUARES (OLS) METHOD

In this study, the ordinary least squares (OLS) method is also being used. This method be used to apply in one or more explanatory variables. In this study, it is used to determine the relationship between the firm-specific factors and macroeconomics factors towards the company performance. The equation can be represented as follows:

Equation 1: Firm-specific factor model

$$\text{ROA} = a + a_1\text{INDXS} + a_2\text{CR} + a_3\text{OM} + a_4\text{ACP} + e$$

Equation 2: Macroeconomics factor model

$$\text{ROA} = a + a_1\text{GDP} + a_2\text{INF} + a_3\text{ER} + a_4\text{IR} + a_5\text{SD} + e$$

Equation 3: Firm-specific factor and macroeconomics factor model

$$\text{ROA} = a + a_1\text{INDXS} + a_2\text{CR} + a_3\text{OM} + a_4\text{ACP} + a_5\text{GDP} + a_6\text{INF} + a_7\text{ER} + a_8\text{IR} + a_9\text{SD} + e$$

4.0 DATA ANALYSIS AND FINDINGS
4.1 DESCRIPTIVE ANALYSIS

Descriptive analysis is the analysis which used to describe the data features that involved in a study. It illustrates simple summaries regarding the sample (Social Research Methods, 2006). In this study, descriptive analysis is being used to describe the dependent variable (performance of company) and independent variables (risk) where by the dependent variable is represented by return on assets (ROA). Meanwhile, the independent variables such as the firm-specific factors are represented by the corporate governance index score, current ratio, operating margin and average collection period while the macroeconomic factors are represented by gross domestic products (GDP), inflation, interest rate, exchange rate and standard deviation.

Table 4.1.1: Descriptive Statistics

	Mean	Std. Deviation	N
ROA	.0851	.0459	5
CG Index Score	.8000	.0000	5
CURRENT RATIO	1.8569	.4244	5
AVERAGE COLLECTION PERIOD	53.8468	4.0009	5
OPERATING MARGIN	.2233	.0908	5
GDP	2.4110	.5358	5
INFLATION	1.5000	.8916	5
INTEREST RATE	2.0200	.4180	5
EXCHANGE RATE	.2571	.0286	5
Standard Deviation	1.8936	1.5977	5

Table 4.1.1 shows the descriptive statistics for the ROA, internal factors and the microeconomics factors. Based on Table 4.1.1, the mean for return on asset (ROA) within 5 years is 8.51%. The ROA is used to measure the return that a company can generate at a certain level of total assets. In this case, ROA of 8.51% indicates that the company is able to generate 8.51 cents for each $1 in assets. Meanwhile, the standard deviation for ROA is 0.0459. Next, for the firm-specific factor, the mean for the corporate governance index is 0.8 with no standard deviation at all. Meanwhile, the mean for the current ratio is 1.8569 which means that the company had more than enough to cover their current liabilities. The standard deviation for current ratio is 0.4244. Meanwhile, the mean for the average collection period is 53.85 days with the standard deviation being 4.0009. For the operating margin, the mean and standard deviation for this ratio are 22.33% and 0.908 respectively.
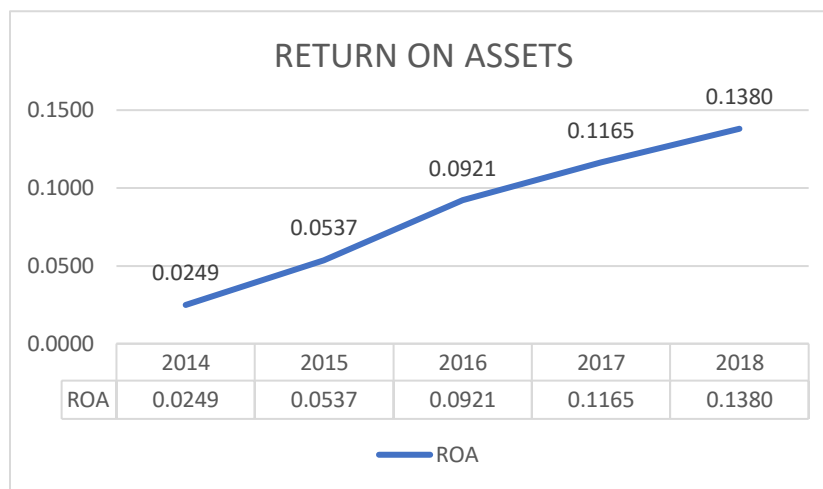
Apart from that, for the macroeconomics factors, the gross domestic product (GDP) has a mean of 2.4110 and standard deviation of 0.5358. Meanwhile the means and standard deviation for inflation rate within 5 years from 2014 to 2018 are 1.5% and 0.8916 respectively. The interest rate has a mean of 2.02% and the standard deviation of 0.4180. Next, the mean and standard deviation of the exchange rate is 0.2571 and 0.0286 respectively. Lastly, the standard deviation has a mean of 1.8963 and standard deviation of 1.5977.

4.2 TREND ANALYSIS

In this study, the trend analysis for the return on assets (ROA), current ratio, operating margin, average collection period and macroeconomics factors are being conducted as well.
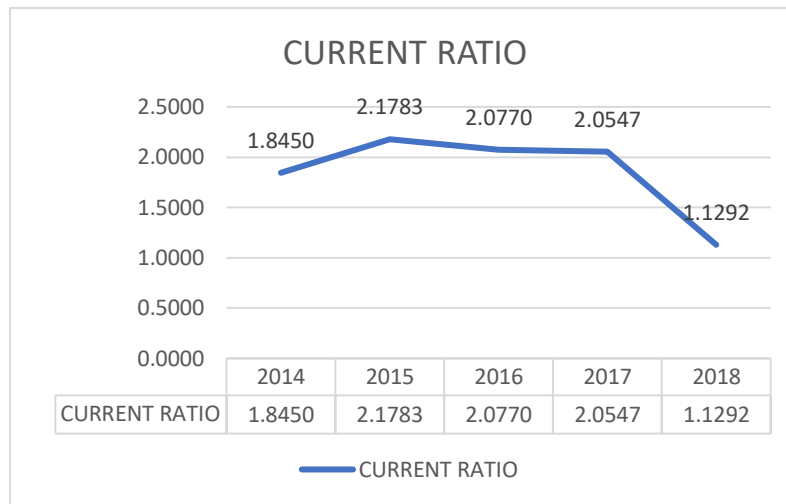
4.2.1 RETURN ON ASSETS

RETURN ON ASSETS

	2014	2015	2016	2017	2018
ROA	0.0249	0.0537	0.0921	0.1165	0.1380

Figure 4.2.1: Return on Assets (ROA) from 2014 to 2018

Figure 4.2.1 shows the trend of Return on Assets (ROA) of Adobe Inc. Based on Figure 4.1.1, the performance of company which represented by ROA is having an upward trend. This is because the increase in the net income of the company is more than the increase in asset of the company from year 2014 to 2018. This result in the upward trend of ROA of the company. The higher ROA from year to year indicates that the company is able to generate more revenue by using lesser investment. This shows that the performance of company is improving throughout the year.
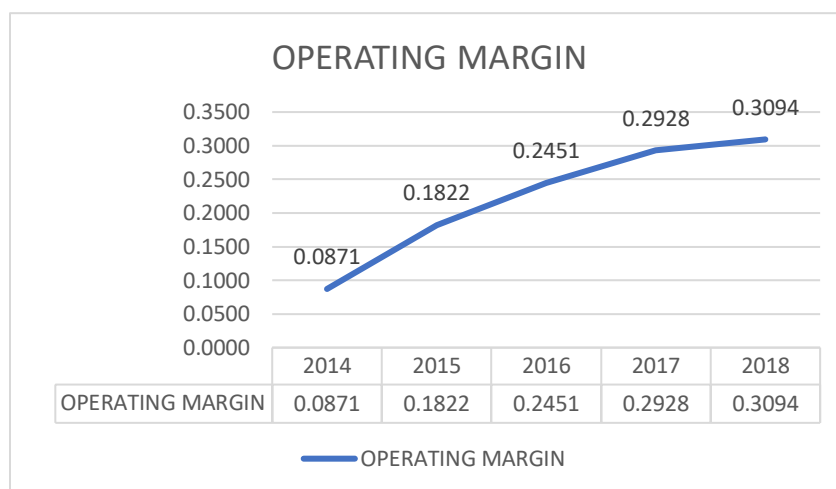
4.2.2 CURRENT RATIO

Figure 4.2.2: Current Ratio from 2014 to 2018

Next, the liquidity risk of the company is measured by the current ratio. From the figure above, we can see that the current ratio of the company is experiencing a slight upward trend from 2014 to 2015 before undergoing a slight drop from 2015 to 2017 and a further dramatic decline in 2018. The current ratio is the lowest in 2018 of 1.1292. This implies that the liquidity of the company is deteriorating and the liquidity risk is increasing. This was probably due to the acquisition of Marketo in 2018 (Novet, 2018). The acquisition of Marketo which took about US$4.75 billion is believed to be funded through a mix of cash on hand and issuance of debt (Moody's, 2018). The cash of Adobe was less than US$5 billion after the acquisition (Miller, 2018). Thus, this result in lesser current asset of the company and lower current ratio.
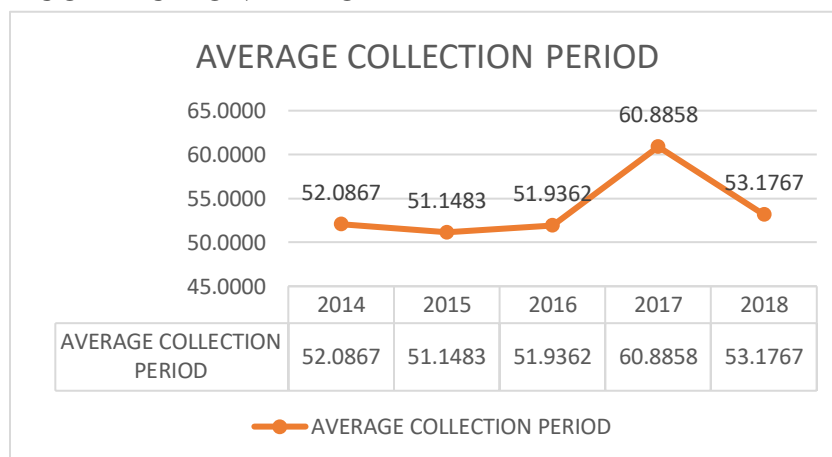
4.2.3 OPERATING MARGIN

OPERATING MARGIN

	2014	2015	2016	2017	2018
OPERATING MARGIN	0.0871	0.1822	0.2451	0.2928	0.3094

——OPERATING MARGIN

Figure 4.2.3: Operating Margin from 2014 to 2018

Besides, based on the figure above, the operating margin of the company is having a slight upward trend from 8.71% in 2014 to 30.94% in 2018. The increasing operating margin indicates that the company is efficient in controlling the expenses in relation to the business operation. The increase in operating margin was probably due to the increase in earnings before interest and tax (EBIT) is more than the increase in sales throughout the years. The increased in EBIT can also be said is due to the increased sales. Hence, this result in increasing trend of operating margin.

4.2.4 AVERAGE COLLECTION PERIOD

AVERAGE COLLECTION PERIOD

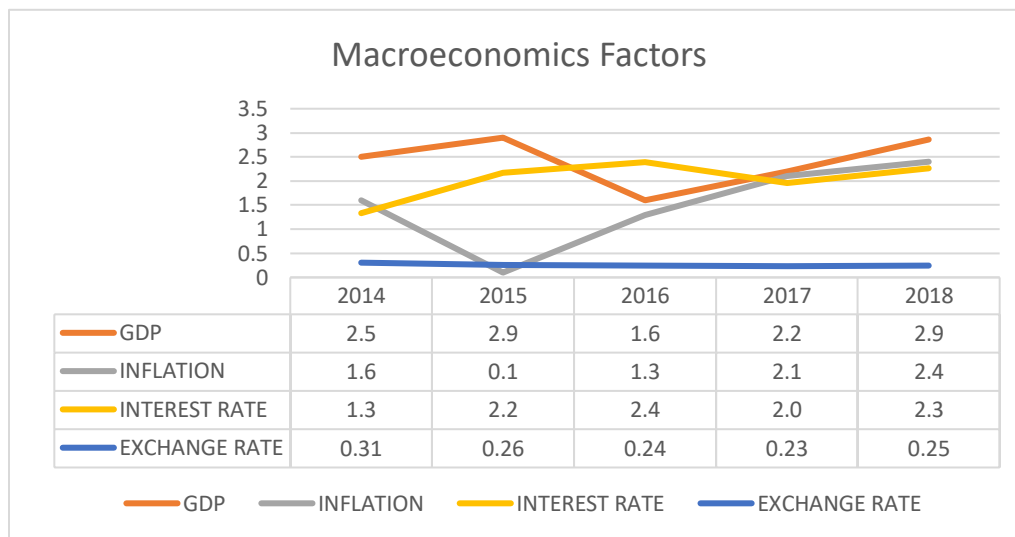|	2014	2015	2016	2017	2018
AVERAGE COLLECTION PERIOD	52.0867	51.1483	51.9362	60.8858	53.1767

——AVERAGE COLLECTION PERIOD

Figure 4.1.4: Average Collection Period from 2014 to 2018

Next, figure above shows the trend of average collection period for Adobe Inc from 2014 to 2018. Based on the figure above, the trend of the average collection period of the company is fluctuating. It lengthen to 60.89 days in 2017 before shortening to 53.18 days in 2018. The increasing average

collection period in 2017 was probably due to the increased in trade receivables by 46.21% from US$833,033,000 in 2016 to US$1,217,968,000 in 2017. The increased in trade receivables was owing to higher sales level. Hence, it result in longer collection period when the trade receivables increased in 2017.

4.2.5 MACROECONOMICS FACTORS

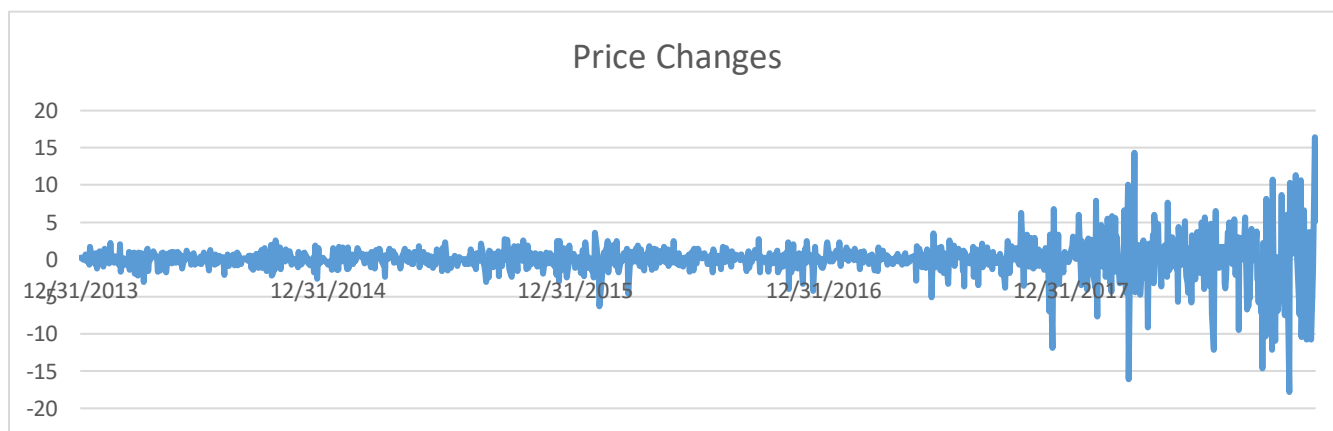**Figure 4.1.5: Macroeconomics Factors from 2014 to 2018**

Figure 4.1.5 shows the trend of macroeconomics factors of United States. Based on the figure above, the growth of GDP of United States is experiencing fluctuating trend from 2014 to 2018. There is a drastic rise in United States GDP from 2016 to 2018. The growth of GDP in United States was the strongest in 2018 of 2.9 as it was probably due to solid consumer spending and business spending. The consumer spending has composed of two-third of United States' economic activity. It has grew robustly at 3.5% in third quarter of 2018. Meanwhile, the business spending has accelerated, growing at 6.7% in the fourth quarter of 2018 (Mutikani, 2019). This has resulted in strong GDP of United States in 2018.

Besides, based on figure above, the inflation rate of United States is having a decreasing trend from 2014 to 2015 before registering an upward trend from 2015 to 2018. The inflation of United States has reached a peak of 2.4% in 2018. This was contributed by the rise in overall food priced that increase by 0.4%. Moreover, the shelter or housing cost that includes the apartment rental and lodging away from home has also increased 0.3%. This has also contribute to part of the rise as it composed of one-third of the consumer price index ("U.S. Inflation Rises 1.9% in 2018", 2019).

Meanwhile, the interest rate is having a slightly upward trend from 2014 to 2016 before dropping again in 2017. In 2016, the interest rate of United States has reached a peak of 2.4%. This is because in 2016, the Federal Reserve was optimistic regarding the economy of United States. The labour market was strengthening with almost full employment and the inflation is moving closer towards 2% which is targeted levels. This has prompted a rise in interest rate of United States (Torry, 2016).

Lastly, the exchange rate of United States against Malaysia is experiencing a slight downward trend from 2014 to 2017 before rising slightly in 2018. In 2018, the US dollar has depreciated against the Malaysia Ringgit. The appreciation of MYR during that time was probably due to the higher commodity prices, which is the crude oil as Malaysia is one of the top exporters of oil (Rasfan, 2018). Thus, when the crude oil price increases, the demand of MYR will also increases and thus caused the MYR to appreciate. In other words, US dollar has depreciated against MYR due to higher oil price. However, the low exchange rate may also implies that the export for the country will become cheaper. This then will result in higher GDP of the country and thus enhance the country's economy in that year.

4.2.6 PRICE CHANGES

Figure 4.1.6: Stock Price Changes of Adobe Inc.

Figure 4.1.6 shows the stock price changes of Adobe Inc. from 2014 to 2018. Based on figure above, it is shown that there is a dramatic positive price change in Adobe stock in October 16, 2018. The price change was $8.17 on that day. This was probably because of quarterly earnings announced by Adobe that beat the estimation by Wall Street analysts. Moreover, Adobe was also expected to earn $2.42 billion on sales. The acquisition of Magento and Marketo are believed will contribute to increased customers which leads to larger Adobe's addressable market (Seitz, 2018). Apart from that, there is

also a huge negative price changes in December 14, 2018 in which the price changes is negative of -$10.76. This was probably due to the announcement of expected earnings for fourth quarter in 2018. The acquisition of Marketo which cost US$4.75 billion is diluting earnings, which was the concern for the investors (Novet, 2018). Hence, it resulted in dropped in stock price of Adobe on that day.

4.2 CORRELATION

Table 4.2.1: Pearson Correlation Coefficient

		ROA	CG Index	CURRENT RATIO	AVERAGE COLLECTION PERIOD	OPERATING MARGIN	GDP	INFLATION	INTEREST RATE	EXCHANGE RATE	Standard Deviation
Pearson Correlation	ROA	1.000	.	-.515	.494	.982	-.095	.629	.659	-.815	.759
	CG Index Score	.	1.000	.	.	.	.	.	.	.	.
	CURRENT RATIO	-.515	.	1.000	.090	-.362	-.427	-.681	-.080	-.043	-.929
	AVERAGE COLLECTION PERIOD	.494	.	.090	1.000	.510	-.200	.533	-.075	-.486	.070
	OPERATING MARGIN	.982	.	-.362	.510	1.000	-.135	.490	.744	-.909	.655
	GDP	-.095	.	-.427	-.200	-.135	1.000	-.125	-.186	.296	.399
	INFLATION	.629	.	-.681	.533	.490	-.125	1.000	-.108	-.151	.640
	INTEREST RATE	.659	.	-.080	-.075	.744	-.186	-.108	1.000	-.833	.377
	EXCHANGE RATE	-.815	.	-.043	-.486	-.909	.296	-.151	-.833	1.000	-.311
	Standard Deviation	.759	.	-.929	.070	.655	.399	.640	.377	-.311	1.000
Sig. (1-tailed)	ROA	.	.000	.188	.199	.001	.439	.128	.113	.046	.068
	CG Index Score	.000	.	.000	.000	.000	.000	.000	.000	.000	.000
	CURRENT RATIO	.188	.000	.	.443	.275	.237	.103	.449	.473	.011
	AVERAGE COLLECTION PERIOD	.199	.000	.443	.	.190	.374	.178	.453	.203	.455
	OPERATING MARGIN	.001	.000	.275	.190	.	.415	.201	.075	.016	.115
	GDP	.439	.000	.237	.374	.415	.	.421	.382	.314	.253
	INFLATION	.128	.000	.103	.178	.201	.421	.	.431	.405	.123
	INTEREST RATE	.113	.000	.449	.453	.075	.382	.431	.	.040	.266
	EXCHANGE RATE	.046	.000	.473	.203	.016	.314	.405	.040	.	.305
	Standard Deviation	.068	.000	.011	.455	.115	.253	.123	.266	.305	.
N	ROA	5	5	5	5	5	5	5	5	5	5
	CG Index Score	5	5	5	5	5	5	5	5	5	5
	CURRENT RATIO	5	5	5	5	5	5	5	5	5	5
	AVERAGE COLLECTION PERIOD	5	5	5	5	5	5	5	5	5	5
	OPERATING MARGIN	5	5	5	5	5	5	5	5	5	5
	GDP	5	5	5	5	5	5	5	5	5	5
	INFLATION	5	5	5	5	5	5	5	5	5	5
	INTEREST RATE	5	5	5	5	5	5	5	5	5	5
	EXCHANGE RATE	5	5	5	5	5	5	5	5	5	5
	Standard Deviation	5	5	5	5	5	5	5	5	5	5

Pearson correlation coefficient is used to measure the strength and relationship between the independent variables and dependent variable. We can determine the strength and relationship between the two variables by using the table below:

Size of correlation	Interpretation
0.90 to 1.00 (-0.90 to -1.00)	Very high positive (negative) correlation
0.70 to 0.90 (-0.70 to -0.90)	High positive (negative) correlation
0.50 to 0.70 (-0.50 to -0.70)	Moderate positive (negative) correlation
0.30 to 0.50 (-0.30 to -0.50)	Low positive (negative) correlation
0.00 to 0.30 (0.00 to -0.30)	Negligible correlation

Source: Hinkle, D.E., Wiersma, W., Jurs, S.G. (2003)

Table 4.2.1 shows the pearson correlation coefficient, r between the variables in this study. The test is considered as significant when the p-value is less than 0.05. Based on Table 4.2.1, the result shows that the operating margin and exchange rate is significant to the ROA whereby the p-value for the operating margin is 0.001 and for exchange rate is 0.046 which is $p < 0.05$. The corporate governance index score is also significantly correlated with ROA.

The variables that has the strongest correlation with ROA is operating margin in which the correlation coefficient, r is 0.982. This shows that operating margin is strongly correlated with ROA. This is followed by the exchange rate whereby the correlation coefficient is -0.815.

Apart from that, the variables operating margin have a very high positive correlation coefficient with ROA. This shows that they have a positive correlation with ROA. This also indicates that when the value of operating margin increases, the value of ROA will also increase. Meanwhile, for exchange rate, it has a high negative correlation coefficient with ROA. This means that when the value of exchange rate increases, the value of ROA will decrease.

4.3 COEFFICIENTS

Table: 4.3.1: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
2	(Constant)	-.254	.039		-6.506	.023		
	OPERATING MARGIN	.701	.038	1.384	18.360	.003	.174	5.750
	EXCHANGE RATE	.710	.121	.442	5.866	.028	.174	5.750

a. Dependent Variable: ROA

Table 4.3.1 shows the coefficient for the model which involve both the firm-specific factors and macroeconomics factors. Step-wise method is being used in this method to find out the predictors which is most relevant. From model 2, we can see that the operating margin and the exchange rate is significant in explaining the company performance as the p-value for both variables are 0.003 and 0.028 respectively ($p < 0.05$). This indicates that any changes in operating margin or exchange rate will affect the company performance. The other variables are being excluded from the model since it is not relevant. The collinearity of this mode is 5.75 respectively which is less than 10. This means that this model is free from bias.

Besides, the beta for the operating margin is showing positive 1.384. This means that it has a positive relationship with the performance of the company. In other words, the higher the operating margin, the better the company performance as the higher operating margin means that the earnings before income and tax (EBIT) of the company is increasing due to the increased sales. This leads to higher profit of the company and better performance. In this study, the operating margin is used to represent the operational risk. Hence, the result is consistent with the studies by Gikundi, Ondiek, Sawa and Musiega (2014), in which the operating risk has a positive relationship with the profitability of the company.

Meanwhile, for the exchange rate, it is also showing a positive beta of 0.442. This indicates that the exchange rate also has a positive relationship with the company performance. This means that the company performance will be better when the exchange rate strengthen. This is because when the exchange rate appreciate, the price of goods imported from other countries will become cheaper. The cost saving in raw material will help to enhance the profit of the company. Hence, this is consistent with the studies done by Campa and Goldberg (1999), in which the exchange rate has a positive relationship with the firm performance as it benefits company that import goods.

4.4 MULTIPLE REGRESSION

Table: 4.4.1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
2	.999[b]	.998	.996	.0028896	2.584

a. Predictors: (Constant), OPERATING MARGIN, EXCHANGE RATE

b. Dependent Variable: ROA

Table 4.4.1 shows the model summary for the combination of firm-specific factors and macroeconomics factors. Based on table above, it is found that by using step-wise, the result generated for model 2 is showing the adjusted R square of 0.996. This implies that by using both the firm-specific factor (operating margin) and macroeconomics factor (exchange rate), the variables in this model can explain 99.6% of the variation in the performance of the company. This means that the model is reliable in which it can influence the performance of the company. Hence, it is suitable in explaining the relationship of company performance and risk. However, there is remaining 0.4% which is not able to be explained by this model. Besides, the durbin-watson of the model which is 2.584 means that it is a good model and free from bias.

Table 4.4.2: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
2	Regression	.008	2	.004	505.125	.002[c]
	Residual	.000	2	.000		
	Total	.008	4			

a. Predictors: (Constant), OPERATING MARGIN, EXCHANGE RATE

The table above shows that the result generated for model 2 in which the p-value for the firm-specific factor and macroeconomics factor is 0.002 ($p < 0.05$). This indicates that the variables are significant with the company performance. It is also significant in representing the model. Thus, this model is reliable and acceptable.

Hence, based on the result of adjusted R-squared from above, we can see that the combination of firm-specific factor and macroeconomics factors has an adjusted R square of 99.6%. This means that 99.6% of the variation in the company performance can be explained by both variables. The also shows that the added in of new variables help to explain more about the performance of company. Hence, both the firm-specific factors and macroeconomics factors are significant in explaining the variance of the company performance.

5.0 CONCLUSION AND RECOMMENDATION

5.1 INTRODUCTION

This study aims to determine the impacts of firm-specific factors and macroeconomics factors towards the company performance for Adobe Inc. in software industry of United States. To attain this objective, the firm-specific factors and macroeconomics factors are being used in this study. Thus, this chapter is going to discuss and explain about the conclusion for the research objectives based on the findings of this study. There are some recommendations that will be provided in this chapter as well.

5.2 DISCUSSION OF RESULT

This study aims to determine the impacts of firm-specific factors and macroeconomics factors towards the company performance for Adobe Inc. in software industry of United States. This study is being carried out to attain the research objectives as follows:

1. To investigate the impact of firm-specific factors towards company performance.

2. To investigate the impact of macroeconomics factors towards company performance.

3. To investigate the impact of both firm-specific factors and macroeconomics factors towards company performance.

Based on Table 4.3.1, it shows that both the firm-specific factor and the macroeconomics factor are significant to the company performance. For the firm-specific factors, the operating margin has a positive significant relationship with the company performance with p-value of 0.003 ($p < 0.003$). The positive beta of 1.384 shows that there is a positive relationship of operating margin with company performance. This means that the increase in operating margin will result in better company performance. Meanwhile, for the macroeconomics factor, the exchange rate is also significant in explaining the company performance with p-value equal to 0.028 ($p < 0.05$). The exchange rate also show a positive beta of 0.442 that indicates that there is a positive relationship with the company performance. This implies that the company performance will be better when the exchange rate strengthen.

Hence, in all, based on the multiple regression analysis (Table 4.4.1), the model summary shows that the 99.6% of the model will be able to explain variation in the company performance by using both the firm-specific factors and macroeconomics factors. Hence, it is a suitable model in explaining the

company performance. Moreover, the ANOVA table that shows the significant value of 0.003 ($p <$ 0.05) indicates that the model is acceptable and reliable. Hence, it supported the research objective 3 in which there is an impact of both firm-specific factors and macroeconomics factors towards company performance.

5.3 LIMITATIONS

This study is restrained to only one software industry in United States. Moreover, it also restrained to only one software company. The financial statements that are being covered is also only five years which is from year 2014 to year 2018. Hence, there is limited information that can be obtained owing to time constraint.

5.4 RECOMMENDATIONS

Based on the result of this study, it is found that operating margin has a significant relationship with the company performance. This means that it can influence the company performance. The operating margin is used to represent the operational risk. When there is enough operating profit, the company will be able to pay for all the expenses. The disruption to business can be avoided and thus, reduce the operational risk. Hence, it is vital for the company to improve its operating margin. One of the method to improve the operating margin is by reducing the operating expense. The company can analyze their expense ledger in order to know whether the company is spending on the crucial components such as payroll. The amount of spending can then be compared with the company gross revenue in order to know the percentage of the expenditure. If the percentage is too large, the company can cut down the unnecessary expense to enhance the operating margin. Next, the company can also create economies of scale in the operation of the business. The company can analyze, observe and evaluate the system in order to find out the areas where they can save money and time through consolidation process. Hence, it can also help to improve the operating margin of the company (Gartenstein, 2019).

Apart from that, the exchange rate also has a significant relationship to the company performance. Exchange rate is one of the indicator of the market risk. The exchange rate can actually influence the company performance as when the exchange rate strengthen, the goods or labor that the company outsource from other countries will become cheaper. Hence, it helps to reduce the cost of the company in term of cost saving and thus increase profitability. However, the situation will be opposite if the exchange rate depreciate. There are some ways that the company can deal with this. In order to

avoid the exchange rate fluctuation, the company can actually use the local supplier or employ local labor. By doing so, the company can avoid higher expenses that incurred from importing goods or employing foreign workers when the exchange rate depreciate as the cost of goods will become more expensive when exchange rate lower. Therefore, by using the local suppliers or employ the local workers instead of outsource from other countries, the company can deal with the changes in the exchange rate.

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7.0 APPENDICES

Scatterplot

Dependent Variable: ROA